

"Amateur Radio: Combining communication experience with modern digital techniques."

RSGB Islands-on-the-Air Contest 24 and 25 July
Boland ARC 40 m Sprint 25 July
SARL 80 m SSB Club Championships 28 July
SARL HF Phone Contest 1 August
SARL YL Sprint 9 August



July 2010

Radio Technology in Action

The second RTA symposium for 2010 will be held at the Bellville campus of the Cape Province University of Technology (CPUT) on Saturday 24 July.

I am looking forward to meet many if not all the radio amateurs in the Western Cape!

Islands-on-the-Air (IOTA) Contest

The RSGB's flagship event, the Islands on the Air Contest, takes place over the weekend of 24 and 25 July. This is a major international contest, but less-experienced entrants also appreciate its friendly atmosphere.

The aim of the contest is to promote contacts between stations in qualifying IOTA island groups and the rest of the world and to encourage expeditions to IOTA islands. The contest runs from 12:00 UTC on Saturday 24 July to 12:00 UTC Sunday 25 July 2010.

CW and/or phone activity on 80, 40, 20, 15 and 10 metres. The IARU band plans must be observed; with CW contacts being made only in the recognised CW ends of the bands. Contest-preferred segments must be observed, no operation to take place on 3500 - 3510, 3560 - 3600, 3650 - 3700, 14060 - 14125 and 14300 - 14350 kHz.

Visit <http://www.rsgbcc.org/hf/rules/2010/riota.shtml> for the rules of the IOTA contest.



Some Bloemfontein radio amateurs had planned to participate in the IOTA contest! We found this long narrow island, ideal for our inverted V antenna.

We applied for an IOTA number, but the IOTA Committee is refusing to issue one - something about not enough water around the island.

We are now planning something for the International Lighthouse Weekend.

SARL Top Band Contest

Geoff Levey, ZS6GRL, sent the following information about the SARL Top Band Contest.

This contest took place from 17 to 20 June 2010. Only 10 logs were received which was disappointing as statistics from the logs submitted show

HF Happenings 415



July

2 - 12 ZS10WCS operated by East Rand ARC

1 closing date Youth Day logs
3 Durban July; Wimbledon Ladies Final
4 Wimbledon Men's Final
6 closing date Top Band logs
10 - 11 IARU HF Championships
12 closing date Digital contest logs; closing of World Cup Soccer
13 Schools open
17 CQ WW VHF contest
18 Mandela Day; Delville Wood Sunday; CQ WW VHF contest
24 RTA, Cape Town; RSGB IOTA Contest
25 RSGB IOTA Contest; Boland 40 m Sprint
28 SARL Club Phone Contest

August

1 SARL HF Phone Contest
4 closing date SARL Club logs
9 National Women's Day, SARL YL Sprint; closing date Boland logs
12 First day of Ramadan; International Youth Day
16 closing date HF Phone logs
21 RTA Port Elizabeth
21/22 International Lighthouse and Lightship activity
24 closing date YL Sprint logs
29 SARL HF CW Contest
31 African Traditional Medicine Day

that 52 call signs were active. The results are as follows and congratulations to the winners.

1st Gary Immelman, ZS6YI, 143 points
2nd Geoff Levey, ZS6GRL, 137 points
3rd Phillip van Tonder, ZS6PVT, 110 points
4th Mitchel Mynhardt, ZS6YH, 99 points
4th Derek Stuart, ZS2J, 99 points
6th Marius Preston, ZS4MP, 98 points
7th Jan Botha, ZS4JAN, 79 points
8th Dirk Els, ZS6AKU, 72 points
9th Tjerk Lammers, ZS6P, 58 points
10th Keith Liddle, ZS6AGF, 39 points

International Lighthouse and Lightship Week-end

I paid a visit to the ILLW web page and see that seven South African lighthouses will be on the air on 21 and 22 August 2010.

Cape Infanta, ZA0002 - ZS1AZ
Greenpoint, ZA0006 - ZS1CT
Danger Point, ZA0005 - ZS1OAR
Ystervak Point Lighthouse, ZA0009 - ZS1SKR
Cape Hangklip, ZA0010 - ZS1TB
Cooper Lighthouse, ZA0004 - ZS5D
Cape St Lucia Lighthouse, ZA0003 - ZS5ZLB

Numbers Stations: Mystery over the Airwaves

National Public Radio in the US has carried a very interesting item about Numbers Stations. If you have ever tuned around the shortwave bands, found a station transmitting a succession of numbers and wondered what they were, then read this fascinating item from NPR to learn more.

Numbers stations are unlicensed, which makes it hard to figure out where they are broadcasting from. In the shadowy corners of the shortwave radio spectrum, you can often find mysterious mechanical voices counting off endless strings of numbers - in English, Czech, Russian and German, even Morse code. But who's listening?

The voices are coming from what are known as "numbers stations," and they have long been thought to be part of international espionage operations. In fact, the Russian spies recently captured here in the U.S. may have been getting orders from Moscow via a shortwave numbers station.

Mark Stout is the official historian at the International Spy Museum. He tells NPR's Guy Raz that the stations are unlicensed, which makes it hard to figure out where they are broadcasting from. Moreover, the mystery only deepens: no government has ever officially admitted to using numbers stations. No one is really sure when the stations began broadcasting, though they are most likely a Cold War-era invention.

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In addition, Stout says, no matter how advanced modern computer cryptography is, good old shortwave is often the best option for getting messages to spies in the field. "Because (a message) can be broadcast over such an enormous area, you can be transmitting to an agent who may be thousands of miles away," he says. And, he adds, computer communications almost always leave traces.

"It's really hard to erase data out of your hard drive or off a memory stick," he says. "But all you need here is a shortwave radio and pencil and paper."

Thousands of enthusiasts all over the world track numbers station broadcasts, but no one has been able to crack them yet. Stout says that is because the transmissions use an unbreakable encryption system called a one-time pad: encryption key is completely random and changes with every message.

"You really truly cryptanalytically have no traction getting into a one-time pad system," Stout says. "None at all."

But if you still want to have a go at it, get a shortwave radio and start listening. Stout says there are plenty of websites that list the stations that may be on the air right now.

<http://www.npr.org/templates/story/story.php?storyId=128586766>

Morse code transmitter train scare

The *Japan Times* reports that a suspicious object, which led to the disruption of 25 trains, turned out to be an Amateur Radio Morse code transmitter.

Tuesday 20 July 2010

Mystery package causes train scare

Nagoya (Kyodo). A suspicious object on a train in Aichi Prefecture that was later confirmed to be a radio device left behind by a passenger caused a three-hour disruption Sunday evening on Nagoya Railroad Co.'s Komaki Line, police and railway officials said.

It took about three hours after the object was found and taken off the train to determine it was a ham radio Morse code transmitter, which a 47-year-old company employee left behind on his way home after attending an amateur radio event in western Japan, the police said.

After receiving a passenger report shortly past 8 p.m. that a suspicious bag was on the four-car train bound for the city of Inuyama from Nagoya, railway officials moved it to nearby Kasugai Station and called the police, they said.

This led to the disruption of 25 train runs between Komaki and Nagoya from around 8 p.m. to 11:15 p.m.

Radio Amateur received Apollo 11

The ARRL report on the reception of signals from the Apollo 11 lunar astronauts by a Radio Amateur 41 years ago. In July of 1969, a ham radio operator and amateur radio astronomer by the name of Larry Baysinger, W4EJA, accomplished an amazing feat. He independently detected radio transmissions from the Apollo 11 astronauts on the lunar surface.

Fortunately, Glenn Rutherford, a young reporter for the Louisville (Kentucky) Courier-Journal, recorded his accomplishments. "Lunar Eavesdropping: Louisvillians hear moon walk talk on homemade equipment,"

Read the ARRL story at <http://www.arrl.org/eavesdropping-on-apollo-11>

African DX

Seychelles, S7. Marq, CT1BWW / S79BWW, and Juan Carlos, EA2RC / S79SAL, will be active from the Anse National Park (WFF SEY-004) on 17 - 31 July 2010. The QTH will be the Chalets

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d'Anse Forbans, Pirates Bay, island of Mahe (AF-024, WLOTA L-3286, WW Loc. LI75SF), Seychelles. They will be active on 80 - 6 m using Kenwood TS480s, with a vertical Force 12 XK40 and some wire hardware. This activation is valid from following Awards - DXCC, WAZ, WAC, WPX, IOTA, WFF, WLOTA, AAA, ZONE 39, BWWAward and Mahe Northwest Point of South reef lighthouse (ARLHS SEY-004). Marq will also be participating in the RSGB IOTA Contest (24 - 25 July). QSL via home call, direct or by the bureau. Website - www.ct1bww.com/s79bww

Seychelles, S7. Jose, EA4DB, will be active as S79DB between 3 and 14 August. Activity will be holiday style with operations on 40 - 10 metres using CW, SSB, RTTY and PSK. He will be using a FT-875D w/100 watts and dipoles. QSL via his home call sign.

Lampedusa Island, IG9. Flavio, IW2NEF will be active as IG9/IW2NEF from Lampedusa Island (AF-019, IIA AG-001, MIA MI-126, WLOTA L-2312, Grid Loc. JM65) on 18 - 31 July 2010. He will be active holiday style on 40 - 6 metres using 100 w maximum power. He plans to participate in the RSGB IOTA Contest (24 - 25 July). QSL via his home call sign, by the bureau or direct.

Lampedusa Island, IG9. Ruggero, IK2PZC will be active as IG9/IK2PZC from Lampedusa Island (AF-019, IIA AG-001, MIA MI-126, WLOTA L-2312) on 22 - 31 July 2010. He will operate SSB, RTTY and PSK, and will participate in the IOTA Contest. QSL via home call.

Senegal, 6W. Operators Silvia EA1AP, Juanjo EA1CJ, Alberto EA1SA and Raul EA5KA will be active from the 'Le Calao' rental shack, Somone, Senegal, on 21 - 31 July 2010, using the call sign 6V7W. They will be active on 160 to 6 m, SSB, CW and RTTY. They will try to be active with three stations on, sometimes with special emphasis on the 6 metre band (WW Loc IK14LL). On 6 m they will use 100 W and a 5 element yagi, listening 50,100 (CW) and 50,110 (USB). QSL via EA5KA. Further information, plus online logs, can be found at 6v7w.dxciting.com

Senegal, 6W. Gerard, F5NVF, will be active as F5NVF/6W between 25 October and 1 November. Activity will be on CW on the HF bands. No other details were provided. QSL via his home call sign.

Rwanda, 9X. Tom, DL2RUM will return to Kigali, Rwanda, for business. He hopes to get his licence on Wednesday 21 July 2010. The call 9X0TL was assigned to Tom and all papers are prepared. With interruptions (6 - 8 days each), he will stay there until the end of August / beginning of September 2010. This is not a dedicated DXpedition; it is a spare time operation only. K3, 600 Watt Solid State PA, Butternut HF-9V, HB9CV (6 m), wires - 80 - 6 m - CW, SSB, RTTY. QSL via home call. Further information and the online log at dl2rum.de/

Canary Islands, EA8. Bernie, GM4WZG will be active as EA8/G4WZG/p from Isla de Gran Canaria (AF-004, DIE S-005, WLOTA L-0969) on 23 - 26 July 2010, including the RSGB IOTA Contest. QSL via home call, direct or bureau.

Democratic Republic Of Congo, 9Q. Patrick is active as 9Q50UN and has been active on 20 metres around 14:00 to 16:00 UTC and then around 23:00 to 00:30 UTC. QSL via ON4BR.

Democratic Republic Of Congo, 9Q. 9Q50AR is a special event call sign to celebrate the 50th anniversary of the independence of the Democratic Republic of the Congo," DX World reports. Different local operators will air it from the club station in Kinshasa until the end of 2010. Please be patient with them, as they "might not be skilful enough to handle huge pile ups.

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Egypt, SU. Gab, HA3JB, will once again be active as SU/HA3JB between September and November. He has renewed his license. Activity is planned for CW, RTTY, PSK31 and some SSB. He will also be in the CQ WW RTTY Contest. QSL via his home call sign direct only with SAE to Gabor Kutasi, H-8601 Siofok, PO Box 243, Hungary. It is suggested to PLEASE write on your QSL card your e-mail address, and you will receive an e-mail feedback. For more details and updates, visit <http://www.ha3jb.com>

The Gambia 2010 DXpedition. Members of the Czech and Slovak OMOC Contest Crew have announced another DXpedition to The Gambia to take place between 18 November and 1 December. They plan to renew the call signs from their previous DXpedition, C50C or C52C used in The Gambia 2007, the greatest Slovak expedition of its kind ever. The special call sign C5A will be reserved for the CQ WW DX CW Contest.

The team members of The Gambia 2010 DXpedition are Rich, OK8WW/OM2TW, Jiri, OK1RI, Joe, OM5AW, Norbert, OM6NM, Roman, OM2RA, Jiri, OK1DO, Lada, OK1DIX, Petr, OK1FFU, and Vlada, OK1NY.

For more details and updates, visit their Web at http://www.om0c.com/?Gambia_2010_-_C5A

Special Event Stations

Spain, Soccer World Cup Champions. To celebrate Spain winning the World Cup Championships, the Directorate General of Telecommunications of Spain has authorised Spanish stations to use the following special prefixed until end of July (31 July): AM - EB distinctive prefix; AN - EC distinctive prefix; AO - EA distinctive prefix.

Netherlands. Fred, PA0FAW, will use the special event call sign PA10WSF between 2 and 30 August. Activity is to celebrate the "World Statues Festival" in Arnhem which takes place between 28 and 29 August <http://www.worldstatues.nl/>. Activity will be mainly CW and the Digital modes. A special QSL will be issued and will be available via the Bureau, direct (preferred), eQSL (no LoTW), and of course SWLs 100%.

Market Reef. Members of the Scandinavian Amateur Radio Teleprinter Group (SARTG) will activate the special call sign OJ0SARTG during the SARTG WW-RTTY Contest (21 and 22 August) as a Multi-Single entry. Operators mentioned are Kari, OH2BP, Charlie, SM4RGD, Jan, SM5FUG, Ewe, SM7BHM, and Nils-Goran, SM7CAS. Look for activity the day before and after the contest on CW, SSB and RTTY with operators signing OJ0/homecall. QSL OJ0SARTG via SM7BHM, direct or by the Bureau.

Contest Calendar

This week's contests compiled by Bruce Horn, WA7BNM. The period covered is 19 July to 26 July 2010.

NAQCC Straight Key/Bug Sprint
00:30 - 02:30 UTC 22 July
Mode: CW
Bands: 80, 40 and 20 m
Classes: (none)
Max power: 5 watts

Exchange: RST, state, province or country
and NAQCC no or power
Work stations: Once per band
QSO Points: 1 point per QSO with non-
member; 2 points per QSO with member

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Multipliers: Each state, province or country once

Key Type Mult: 2x if straight key, 1.5x if bug, 1x if other

Score Calculation: Total score = total QSO points x total mults x key type mult

Submit logs by: 23:59 UTC 25 July 2010

E-mail logs to:

naqcc33[at]windstream[dot]net

Post log summary at:

http://home.windstream.net/yoel/sprint_submit_log.html

Mail logs to: John Shannon, K3WWP, 478 E. High St., Kittanning, PA 16201, USA

Find rules at:

<http://home.windstream.net/yoel/sprint201007.html>

RSGB 80 m Club Data Championship

19:00 - 20:30 UTC 22 July

Mode: RTTY, PSK

Bands: 80 m Only

Classes: (none)

Exchange: RST and serial no

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: (see rules)

Submit logs by: 29 July 2010

Upload log at:

<http://www.vhfcc.org/cgi-bin/hfenter.pl>

Mail logs to: (none)

Find rules at:

<http://www.rsgbcc.org/hf/rules/2010/r80mcc.shtml>

NCCC Sprint Ladder

02:30 - 03:00 UTC 23 July

Mode: CW

Bands: 160, 80, 40 and 20 m

Classes: Single Op

Max power: 100 watts

Exchange: (see rules)

Work stations: Once per band

QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station

Multipliers: Each US state (including KL7 and KH6) once per band; Each VE province once

per band; Each North American country (except W/VE) once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 25 July 2010

E-mail logs to: (none)

Post log summary at:

<http://www.hornucopia.com/3830score/>

Mail logs to: (none)

Find rules at:

<http://www.ncccsprint.com/rules.html>

RSGB IOTA Contest

12:00 UTC 24 July to 12:00 UTC 25 July

Mode: CW, SSB

Bands: 80, 40, 20, 15 and 10 m

Classes: Single Op 12 hrs - Island or World - CW, SSB or mixed - QRP, low or high; Single Op 24 hrs - Island or World - CW, SSB or mixed - QRP, low or high; Single Op Assisted 12 hrs - Island or World - CW, SSB or mixed - QRP, low or high; Single Op Assisted 24 hrs - Island or World - CW, SSB or mixed - QRP, low or high; Multi-Op - Island or World - QRP, low or high

Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts

Exchange: RS(T), serial no and IOTA no (if applicable)

Work stations: Once per band per mode

QSO Points: 3 points per QSO with non-island station; 15 points per QSO with IOTA-island station

Multipliers: Each IOTA reference once per band per mode

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 15 August 2010

E-mail logs to:

[iota\[dot\]logs\[at\]rsgbcc\[dot\]org](mailto:iota[dot]logs[at]rsgbcc[dot]org)

Mail logs to: RSGB IOTA Contest, Radio Society of Great Britain, 3 Abbey Court, Fraser Road, Priory Business Park, Bedford MK44 3WH, England

Find rules at:

<http://www.rsgbcc.org/hf/rules/2010/riota.shtml>

Boland ARC 40 m Mobile Contest





13:00 to 16:00 UTC 25 July

Find rules at: page 7 of this publication

Next Week's Contests

SARL 80 m Club Phone Contest, 17:30 - 18:30 UTC 28 July

SARL HF Phone Contest, 13:00 to 16:30 UTC 1 August

SARL YL Sprint, 09:00 to 10:00 UTC 9 August

This week in History

A look back at events that made history this week - compiled by the Summerland Amateur Radio Club of Lismore, NSW. The week starting Monday 19 July 2010

1829 - William Burt of Mt Vernon, MI, USA patented the first typewriter

1837 - Wheatstone and Cooke send their first telegraph message over a distance of 2 km

1837 - London's first railway station, Euston, opens

1843 - The 'Great Britain', the first iron Atlantic liner is launched

1843 - Amelia J Bloomer invents this form of female dress

1847 - R. M. Hoe, of New York City patented the rotary-type printing press

1866 - Dr M Loomis transmits signals 15 miles using kite antennas

1897 - Prof HW Bragg transmits over five miles (8 km) from the Observatory to Henley Beach, Adelaide.

1897 - Marconi registers the "Wireless Telegraph and Signal Company"

1898 - First newspaper message sent from a ship to the Daily Express in London

1899 - The Royal Navy successfully trials Marconi radio sets during exercises

1969 - Neil Armstrong steps onto the surface of the moon (20 July)

Boland ARC 40 Metre Sprint

The aim of the Boland ARC 40 metre Sprint is a fun activity to promote contacts on 40 metres between radio amateurs in Southern African countries. The Sprint runs from 13:00 to 16 UTC on Sunday 25 July 2010.

Radio amateurs can participate as fixed or mobile stations, mobile stations include field stations and portable stations. The exchange is your call sign, a RS report and the year in which you were first licensed.

It is a phone only Sprint on the 40 metre band, utilising 7,060 - 7,100 and 7,135 - 7,200 MHz. Only three [3] contacts per frequency are allowed before you have to change frequency. You may only return to a previously used frequency after five [5] contacts. Only wire or mobile antennas and a maximum output of 100 watt may be used.

The scoring is as follows - contacts between fixed stations count 1 point. Contacts between fixed and mobile station count 2 points and contacts between two mobile stations count 3 points.

ONLY Excel Log sheets will be accepted. Log sheets shall be submitted within 15 days after the contest and can be sent by e-mail to [zs1bak\[at\]bark\[dot\]org\[dot\]za](mailto:zs1bak[at]bark[dot]org[dot]za). A printed version of this log sheet can be mailed to BARK, PO Box 273, Strand, 7139. The log sheet is available on the SARL web site. The closing date for your log submission is 9 August 2010.

A certificate will be awarded to the 1st, 2nd and 3rd place in South Africa, as well as the highest score in each division.

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SARL 80 m Club Championship

The SARL 80 m Club Championships is a series of short weekday evening contests on 80 m based around competition between affiliated radio clubs. Individual scores in every event count towards a radio club's overall score so it is important for the club to get members to come on in as many sessions and as many modes as possible.

The fourth contest in the series takes place from 17:30 to 18:30 UTC on Wednesday 28 July 2010 and it is a phone contest utilising 3,600 – 3,650 and 3,700 – 3,775 MHz. The exchange is a RS report and a consecutive serial number starting at 001.

Club members can participate as a Single Operator or Multi-operator using Low power – 100 w maximum power at the transmitter output or QRP – 10 w maximum power at the transmitter output.

One point per contact is scored and only one contact per station is allowed.

Each session is a contest in its own right, and log entries must be submitted to zs4bfn@netactive.co.za within seven (7) days of the contest. The closing date for this session is Wednesday 4 August.

In order to count towards the total for an affiliated radio club, the radio club name must be clearly indicated on the entry. At the end of the programme in November, the affiliated radio club whose MEMBERS have made the highest aggregate score will be awarded the Affiliated Club trophy.

SARL HF Phone Contests

The aim of the SARL HF Phone Contest is for participants to contact as many amateurs in Southern Africa as possible on the 20, 40 and 80 m bands. The HF Phone contest takes place on Sunday 1 August 2010 from 13:00 to 16:30 UTC. The following frequencies may be utilised – 14,125 to 14,350 MHz; 7,060 to 7,100 and 7,130 to 7,200 MHz; 3,603 to 3,650 and 3,700 to 3,800 MHz

There are four categories of participation - a) Single Operator Single Band; b) Single Operator All Band; c) Multi Operator Single Band or d) Multi Operator All Band. The exchange is a RS report and a consecutive serial number starting at 001. A multi-operator station transmitting on several bands simultaneously may at their discretion use separate number sequences for each band.

Each contact counts 1 point, each call area worked on each band counts 2 points and each station contacted on all three bands counts 2 points. The call areas are as follows - Area 1: ZS1 Western Cape; Area 2: ZS2 Eastern Cape; Area 3: ZS3 Northern Cape; Area 4: ZS4 Free State; Area 5: ZS5 KwaZulu-Natal; Area 6: ZS6 Gauteng, Mpumalanga; Limpopo and North West; Area 7: 3B8 Mauritius, 3DA Swaziland, 7P Lesotho, 7Q Malawi, C9 Mozambique, Z2 Zimbabwe, 5R Madagascar, FR Reunion Island and FH Mayotte; and Area 8: 9J Zambia, A2 Botswana, D2 Angola, V5 Namibia, ZD9 Gough and Tristan da Cunha Islands, ZS7 Antarctica and ZS8 Marion Island. Contacts with stations outside these areas are allowed, QSO points may be claimed but no zone or three-bander points may be claimed.

There are trophies and certificates awarded for the highest overall score as well as the highest score on a single band. Logs must be submitted within 15 days to the Bloemfontein Radio Amateur Club, Box 12104, Brandhof, 9324 or sent by e-mail to zs4bfn@netactive.co.za. The closing date for the log submissions is 16 August 2010.

SARL YL Sprint

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The SARL YL Sprint is a fun activity to celebrate Women's Day between radio amateurs in Southern African countries. Call "YL Sprint!" The Sprint will be run on Monday 9 August from 09:00 to 10:00 UTC. It is a phone sprint on the 40-metre band using 7.053 to 7.100 and 7.130 to 7.200 MHz.

The exchange is a RS report and YL or OM. Contacts between YL stations are worth 5 points; contacts between YL and OM stations are worth 3 points and contacts between OM stations are worth 1 point.

Log sheets shall be submitted within 15 days after the contest by e-mail to [zs4bfn\[at\]netactive\[dot\]co\[dot\]za](mailto:zs4bfn[at]netactive[dot]co[dot]za) or by mail to the Bloemfontein RAC, Box 12104, Brandhof, 9324. The closing date for log submissions is 24 August 2010.

Items used with acknowledgement to The ARRL Letter, Amateur Radio Newsline, OPDX Bulletin, 425 DX Bulletin, DXNL Bulletin, ARRL DX News, WIA-News, the RSGB News, Southgate ARC and Pete's DX Newsdesk.

Newsletter editors are most welcome to use material from HF Happenings, just remember to acknowledge the source (which could be any one of the names mentioned above). HF Happenings can be provided in MS Word format.

